

What is claimed is:

1. A golf ball comprising a core, and a polyurethane cover covering the core, wherein:

the polyurethane cover is formed by curing a urethane prepolymer having an isocyanate group at a terminal thereof with a curing agent; and

the urethane prepolymer contains a polycarbonate polyol component having a number-average molecular weight of from 300 to 3000.

2. The golf ball according to claim 1, wherein the polycarbonate polyol is poly(hexamethylene carbonate) or poly(1,4-cyclohexamethylene carbonate).

3. The golf ball according to claim 1, wherein:

the urethane prepolymer has a free NCO group content of from 5% to 15% by mass; and

the curing agent is a diol or a diamine each having a number-average molecular weight of from 50 to 500 and is used in an amount such that the equivalent ratio of the amino or hydroxyl group of the curing agent to the free NCO group of the urethane prepolymer (OH/NCO or NH<sub>2</sub>/NCO) assumes 0.8 to 1.2.

4. The golf ball according to claim 1, wherein the polyurethane cover has a Shore D hardness of from 40 to 63 at a non-dimpled portion thereof.

5. The golf ball according to claim 2, wherein:

the urethane prepolymer has a free NCO group content of



from 5% to 15% by mass; and

the curing agent is a diol or a diamine each having a number-average molecular weight of from 50 to 500 and is used in an amount such that the equivalent ratio of the amino or hydroxyl group of the curing agent to the free NCO group of the urethane prepolymer (OH/NCO or  $\text{NH}_2/\text{NCO}$ ) assumes 0.8 to 1.2.

6. The golf ball according to claim 2, wherein the polyurethane cover has a Shore D hardness of from 40 to 63 at a non-dimpled portion thereof.